REMARKS/ARGUMENTS

The missing abstract has been inserted starting on a separate sheet after the claims.

The sentence regarding the TEM measurement previously inserted by Applicants' amendment has been deleted.

Claim 4 has been amended to make the end of line 1 legible.

35 U.S.C. 112, first paragraph

Claims 3, 4, 7, 8 and 14 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which <u>was not described</u> in the specification <u>in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed <u>invention</u>. (Underlining added for emphasis.)</u>

The above rejection is respectfully traversed for the following reasons.

Transmision electron microscopy (TEM) is a well known microscopy technique at least twenty five years before the subject patent application was filed. TEM is mentioned in at least 2500 U.S. patents granted before the filing date of the subject patent application. A partial listing of the U.S. patents granted from February 17, 1976 up to May 15, 2001 is attached. Thus, Applicants submit that Claims 3, 4, 7, 8 and 14 do not contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention and, therefore, are in compliance with the requirements of 35 U.S.C. 112, first paragraph.

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35 U.S.C. 103(a)

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 93/04117 or Christianni et al (US 5,747,560) in view of Suss et al. (US 4,558,075). This rejection is respectfully traversed for the following reasons.

As stated in the International Preliminary Examination Report, neither WO 93/04117, nor Suss et al., (US 4,558,075) discloses the preparation of nanocomposites from an anionic polymer edge-coated quaternary intercalated multilayered silicate material.

Christianni et al (US 5,747,560) do not teach or suggest a quaternary ammonium intercalated multi-layered silicate material having been reacted with a polyvalent anionic organic material so that the edges of the multi-layered silicate material are bound to the polyvalent anionic organic material to form a polyvalent anionic organic edge coated quaternary ammonium intercalated multi-layered silicate material, as required in Claims 1-15.

The Office Action did not say anything about Claims 16-19.

In view of the above remarks, Applicants submit that Claims 1-15 are patentable over WO 93/04117 or Christianni et al (US 5,747,560) in view of Suss et al. (US 4,558,075), and Claims 16-19 are patentable over Kawasumi et al. (US 4,810,734) or Polansky et al (US 6,287,992) in view of Suss et al. (US 4,558,075), or further in view of Brown et al. (US 4,964,918).

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made.

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Conclusion

In view of the above amendments and remarks, the claims are now in condition for allowance and a Notice of Allowance of Claims 1 to 19 is respectfully requested.

Respectfully submitted,

Nemia C. Damocles

Registration No. 28,368

Phone: (989) 636-9928

P.O. Box 1967 Midland, MI 48641-1967

NCD/blw

44407 -6-

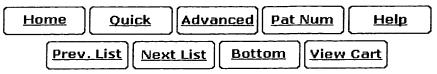
VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claim 4 has been amended as follows:

4. The process of Claim 1 or Claim 3, wherein the thermoplastic polymer is a blend of thermoplastic polymers.

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USPTO PATENT FULL-TEXT AND IMAGE DATABASE



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Next 50	Hits =
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Refine Search "TRANSMISSION ELECTRON MICROSCOPY"

PAT.

Title

NO.

751 6,232,156 T Method of manufacturing a semiconductor device

752 6,232,138 T Relaxed InxGa(1-x)as buffers

- 753 6,232,057 T <u>Iodide ion releasing compound</u>, and silver halide light-sensitive photographic material containing the same
- 754 6,232,055 T Silver halid color photographic photosensitive material
- 755 6,231,980 T BX CY NZ nanotubes and nanoparticles
- 756 6,231,668 **T** Method for manufacturing a calibrated scale in the nanometer range for technical devices used for the high resolution or ultrahigh-resolution imaging of structures and such scale
- 757 6,231,636 T Mechanochemical processing for metals and metal alloys
- 758 6,229,153 T High peak current density resonant tunneling diode
- 759 6,228,922 T Method of making conductive metal-containing polymer fibers and sheets
- 760 6,228,638 T Escherichia coli CSRB gene and RNA encoded thereby
- 761 6,228,565 T Silver halide color photographic photosensitive material
- 762 6,228,535 **T** Nickel hydroxide positive electrode material exhibiting improved conductivity and engineered activation energy
- 763 6,228,515 T Underlayer for use in a high density magnetic recording media

- 764 6,228,248 **T** Biomimetic pathways for assembling inorganic thin films and oriented mesoscopic silicate patterns through guided growth
- 765 6,228,117 T Device for tissue engineering bone
- 766 6,225,412 T Plastic toughened plastics
- 767 6,225,192 T Method of producing a thin layer of semiconductor material
- 768 6,225,041 **T** Silver halide photographic emulsion and silver halide photographic light sensitive material
- 769 6,224,881 **T** DNA molecule fragments encoding for cellular uptake of Mycobacterium tuberculosis and uses thereof
- 770 <u>6,224,739</u> **T** <u>Process for preparing solvent-stabilized metal colloids and substrate-immobilized metal clusters</u>
- 771 6,223,961 T Apparatus for cleaving crystals
- 772 6,221,471 T Rubber modified monovinylidene aromatic polymer blends
- 773 6,221,440 T Process for plating metal coating
- 774 6,221,330 T Process for producing single wall nanotubes using unsupported metal catalysts
- 775 6,221,275 T Enhanced heat transfer using nanofluids
- 776 6,221,154 **T** Method for growing beta-silicon carbide nanorods, and preparation of patterned field-emitters by chemical vapor depositon (CVD)
- 777 6,218,663 **T** Process and device for ion thinning in a high resolution transmission electron microscope
- 778 6,218,594 T Guinea pig model for leiomyomas
- 779 6,218,360 T Collagen based biomaterials and methods of preparation and use
- 780 6,218,356 T Neural receptor tyrosine kinase
- 781 6,218,324 T Ceramic composites containing weak interfaces with ABO4 tungstate, molybdate, tantalate, and niobate phases
- 782 6,218,141 T High molecular weight surface proteins of non-typeable haemophilus
- 783 6,218,095 T Silver halide color photographic photosensitive material
- 784 6,217,843 T Method for preparation of metal intercalated fullerene-like metal chalcogenides
- 785 6,217,416 T Chemical mechanical polishing slurry useful for copper/tantalum substrates
- 786 6,215,248 T Germanium emitter electrodes for gas ionizers
- 787 6,215,061 T Photoconductive thin film, and photovoltaic device making use of the same
- 788 6,214,936 T Use of microphase-separated polymer blends for the preparation of permeable membranes
- 789 6,214,543 **T** DNA molecule encoding for cellular uptake of Mycobacterium tuberculosis and uses thereof
- 790 6,214,422 T Method of forming a hybrid polymer film
- 791 6,214,331 **T** Process for the preparation of aqueous dispersions of particles of water-soluble polymers and the particles obtained
- 792 6,214,309 T Sinterable carbides from oxides using high energy milling
- 793 6,214,178 T Focused ion beam formation of angled optoelectronic devices
- 794 6,211,536 T Semiconductor device having improved crystal orientation
- 795 6,211,431 T Plant transcription regulators from circovirus

Patent Database Sea...: "TRANSMISSION ELECTRON MICROSCOPY" in 1976 to presen Page 3 of 3

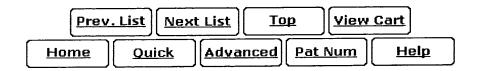
796 6,211,416 T Method for producing enol ethers

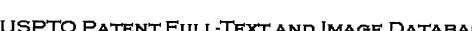
797 6,211,298 T Rubber modified monovinylidene aromatic polymer compositions

798 6,211,287 T Particle formation process and marking materials thereof

799 <u>6,210,952</u> **T** <u>Bacillus thuringiensis mutants which produce higher yields of crystal delta-endotoxin than their corresponding parental strains</u>

800 6,210,889 **T** Method for enrichment of fetal cells from maternal blood and use of same in determination of fetal sex and detection of chromosomal abnormalities





USPTO PATENT FULL-TEXT AND IMAGE DATABASE

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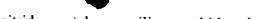
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Refine Search TRANSMISSION ELECTRON MICROSCOPY"

PAT. NO. Title

- 3351 4,151,686 T Silicon carbide and silicon bonded polycrystalline diamond body and method of making it
- 3352 4,149,915 T Process for producing defect-free semiconductor devices having overlapping high conductivity impurity regions
- 3353 4,149,074 T Detector for a scanning transmission-type electron microscope
- 3354 4,138,383 T Preparation of small bio-compatible microspheres
- 3355 4,129,462 T Gamma prime hardened nickel-iron based superalloy
- 3356 4,128,765 T Ion beam machining techniques and apparatus
- 3357 4,127,558 T Compositions of a polyphenylene ether resin and alkenyl aromatic resins modified with EPDM rubber containing propylene
- 3358 4,127,416 T Method of producing a ceramic product
- 3359 4,125,406 **T** Alumina-chromia-metal (IV) oxide refractory fibers having a microcrystalline phase
- 3360 4,124,401 **T** Polycrystalline diamond body
- 3361 4,123,396 **T** Impregnated metal-polymeric functional beads
- 3362 4,119,840 T Fast acting gain photocurrent device
- 3363 4,118,222 **T** Glassy hafnium-beryllium alloys
- 3364 4,116,994 T Hydrocarbon synthesis from CO and H.sub.2 using Rh supported on titanium oxides
- 3365 4,115,228 T Method of making secondary-electron emitters





- 3366 4,110,084 T Composite of bonded cubic boron nitride crystals on a silicon carbide substrate 3367 4,106,939 T Imaging and recording of information utilizing a tellurium tetrahalide complex of an aromatic amine
- 3368 4,105,598 T Cell specific, variable density, polymer microspheres
- 3369 4,102,850 T High impact polyphenylene ether resin compositions containing mineral oil
- 3370 4,101,505 T Compositions of a polyphenylene ether resin and EPDM rubber-modified alkenyl aromatic resins having specified gel content
- 3371 4,101,504 T High impact compositions of a polyphenylene ether resin and alkenyl aromatic resins modified with EPDM rubber
- 3372 4,101,503 T Compositions of a polyphenylene ether resin and high molecular weight alkenyl aromatic resins modified with EPDM rubber
- 3373 4,101,460 T High performance ion exchange composition
- 3374 4,097,935 T Hydroxylapatite ceramic
- 3375 4,094,706 T Preparation of zirconium alloys
- 3376 4,086,001 T Planar optical waveguide
- 3377 4,069,068 T Semiconductor fabrication method for improved device yield by minimizing pipes between common conductivity type regions
- 3378 4,067,756 T High strength, high ductility low carbon steel
- 3379 <u>4,067,734</u> **T** Titanium alloys
- 3380 4,053,335 T Method of gettering using backside polycrystalline silicon
- 3381 4,049,478 T Utilization of an arsenic diffused emitter in the fabrication of a high performance semiconductor device
- 3382 4,046,720 T Crosslinked, porous, polyacrylate beads
- 3383 4,042,615 T Hydrocarbon synthesis from CO and H.sub.2 using Ni supported on a titanium oxide
- 3384 4,042,614 T Hydrocarbon synthesis from CO and H.sub.2 using Ru supported on a titanium oxide
- 3385 4,038,543 T Scanning transmission electron microscope including an improved image detector
- 3386 4,038,216 T Material and method of making secondary-electron emitters
- 3387 4,035,316 T Cell specific, variable density, polymer microspheres
- 3388 4,029,718 T Pivalolactone random graft copolymers
- 3389 4,028,149 T Process for forming monocrystalline silicon carbide on silicon substrates
- 3390 4,018,626 T Impact sound stressing for semiconductor devices
- 3391 4,004,449 **T** Impact sound stressing for semiconductors
- 3392 3,997,368 T Elimination of stacking faults in silicon devices: a gettering process
- 3393 3,985,632 T Small, porous polyacrylate beads
- 3394 3,97<u>7,993</u> **T** Metal oxide aerogels
- 3395 3,962,716 T Reduction of dislocations in multilayer structures of zinc-blend materials
- 3396 3,958,207 T Injection current device and method
- 3397 3,957,741 T Crosslinked, porous, polyacrylate beads
- 3398 3,944,332 T Optical sensitization and development of liquid crystalline devices
- 3399 3,939,346 T Gain photo-current enhancement method